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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,139	08/08/2003	Charles J. Longacre	S1097/20001	3431

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EXAMINER

DUNWOODY, AARON M

ART UNIT PAPER NUMBER

3679

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/637,139

Applicant(s)

LONGACRE ET AL.

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/20/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/1/2004.

The requirement is still deemed proper and is therefore made FINAL.

Priority

No priority claimed.

Information Disclosure Statement

The information disclosure statement (IDS) filed 10/20/2003 is being considered by the examiner; however, the non-patent literature documents are not being considered, because they are not properly cited.

Claim Objections

Claims 1, 2, 9, 10, 12 and 13 are objected to because of the following informalities:

Regarding claims 1, 2, 9, 10 and 13, the phrase "and/or" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "and/or"), thereby rendering the scope of the claim(s) unascertainable.

Regarding claim 12, claim 12 recites "said cam surface"; however, none of the preceding claim language properly introduces the cam surface.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 6173993, Shumard et al.

In regards to claim 1, Shumard et al disclose a joint restraint assembly (10) for connecting pipe ends together, or to other objects, by gripping the outer surface of the pipe, the joint restraint assembly comprising:

a body (14) encircling the pipe, with the body having a plurality of cavities adjacent the pipe and at least one set of a corresponding plurality of threaded bores disposed through the body, each threaded bore of the at least one set of a corresponding plurality of threaded bores being in communication with a respective cavity;

a segment (40) disposed within each of the cavities in the body, and configured to make contact between the body and the surface of the pipe so as to provide resistance to pipe pull-out in proportion to the mechanical or internal pressure loading applied to the pipe; and

a threaded bolt (32) extending through each of the threaded bores to pre-load the respective segment into initial contact with the pipe surface.

In regards to claim 2, Shumard et al disclose the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure being independent of the threaded bolts.

In regards to claim 3, Shumard et al disclose the segment being configured to transmit the load from the pipe to the body while loading the segment primarily in compression.

In regards to claim 4, Shumard et al disclose the segment further comprising at least one edge (52, 54) capable of penetrating the external surface of the pipe.

In regards to claim 5, Shumard et al disclose the at least one edge forming a relief angle, as measured from the pipe surface, that is 25 to 35 degrees, so as to optimize both the structural integrity of the segment edge and the ability of the edge to penetrate the pipe surface (implied).

In regards to claim 6, Shumard et al disclose the circumferential length of all of the segments and their edges comprising a substantial portion of the pipe periphery, thereby distributing the force transmitted through contact with the pipe more uniformly around the pipe periphery, and distributing the force transmitted through contact with the body more uniformly around the body, independently of said threaded bolts.

In regards to claim 7, Shumard et al disclose the shape of the body being optimized to resist the forces imparted to by contact with the segments, the body comprising: a substantially cylindrical portion adjacent to the pipe surface with flange extending radially therefrom; and wherein the body comprising a shape and wall

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thickness compensate for the presence of the cavities to maintain the strength and rigidity of the body.

In regards to claim 9, Shumard et al disclose the segment comprising a cam surface (52, 54) that engages and rotates against the pipe surface to resist pipe pull-out at comparatively high levels of mechanical loading or internal pipe pressure in proportion to the loading.

In regards to claim 10, Shumard et al disclose the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure being independent of the threaded bolts.

In regards to claim 11, Shumard et al disclose the segment being configured to transmit the load from the pipe to the body while loading the segment primarily in compression.

In regards to claim 12, Shumard et al disclose a cam surface (any convenient surface) further comprising a surface texture for engaging the pipe surface.

In regards to claim 13, Shumard et al disclose the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure is independent of the threaded bolts.

In regards to claim 14, Shumard et al disclose the segment being configured to transmit the load from the pipe to the body while loading the segment primarily in compression.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumard et al in view of Pannell et al.

In regards to claim 8, Shumard et al disclose the claimed invention except for an elastomeric material positioned between each of the segments and their corresponding cavities, the elastomeric material disposing the segment in the cavity in an optimum position. Pannell et al teach an elastomeric material (170) positioned between each of the segments (210) and their corresponding cavities, the elastomeric material disposing the segment in the cavity in an optimum position, to graduate the effecting force of the sudden application of a sliding force (col. 4, lines 25-40). As Pannell et al relate to mechanical pipe joints utilizing pipe clamping systems, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an elastomeric material positioned between each of the segments and their corresponding cavities, the elastomeric material disposing the segment in the cavity in an optimum position, to graduate the effecting force of the sudden application of a sliding force, as taught by Pannell et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because it illustrates the inventive concept of the invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is 703-306-3436. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P Stodola can be reached on 703-306-5771. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

.amd



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